CLAIMS

1. A compound, and pharmaceutically acceptable salts, having the formula I:

5

10

wherein:

- R represents an alkyl or alkynyl group having 1-4 carbon atoms, or a phenyl group optionally substituted by C_{1-4} alkyl, alkylthio, alkoxy, halogen, nitro, acylamino, methylsulfonyl or methylenedioxy, or represents tetrahydronaphthyl,

- R¹ represents hydrogen, trifluoro (C₁₋₄) alkyl, alkyl or 20 alkynyl,

- X represents hydrogen, alkyl having 1-4 carbon atoms, alkoxy, trifluoroalkyl, hydroxy, halogen, methylthio or aralkoxy,

- R² represents:

- a C1-C10 alkyl group,

- a phenyl group optionally substituted by one or more of the following groups:

- a C1-C10 alkyl group,

- a halogen group,

30 - a nitro group,

- hydroxy group,

- and/or an alkoxy group.

2. Compound according to claim 1, wherein the R group is the 3,4 methylene dioxy phenyl group of the formula:

5

10

- 3. Compound according to claim 1 or 2, wherein the X group is preferably a fluorine group attached to position 4 in the phenyl ring.
- 4. Compound according to claim 1-3, wherein the R² group represents a C1-C4 alkyl group.
 - 5. Compound according to claims 1-4, wherein the \mathbb{R}^2 group is a C1-C2 alkyl group.
- 6. Compound according to any of the previous 20 claims, having a solubility at about 20°C of at least about 10 mg per ml water.
 - 7. Compound according to claim 6, having a solubility in water of at least 100, preferably at least 500 and most preferably of at least 1000 mg per ml.
- 8. Process for preparing a compound according to any of the previous claims, comprising the steps of mixing together a compound, a salt and/or a base thereof, having the formula II:

30

35

20

wherein:

- R represents an alkyl or alkynyl group having 1-4 carbon atoms, or a phenyl group optionally substituted by C₁₋₄ alkyl, alkylthio alkoxy, halogen, nitro, acylamino, 5 methylsulfonyl or methylenedioxy, or represents tetrahydronaphthyl,
 - R^1 represents hydrogen, trifluoro (C_{1-4}) alkyl, alkyl or alkynyl,
- X represents hydrogem, alkyl having 1-4 carbon atoms, 10 alkoxy, trifluoroalkyl, hydroxy, halogen, methylthio or aralkoxy, with a sulfonic acid of the general formula R²-SO₃H, wherein R² represents:
 - a Cl-C10 alkyl group,
 - a phenyl group optionally substituted by one
- 15 or more of the following groups:
 - a C1-C10 alkyl group,
 - a halogen group,
 - a nitro group,
 - hydroxy group,
 - and/or an alkoxy group,
 to form a solution, whereafter the solid formed may be separated out.
 - 9. Compound according to any of the claims 1-7 obtainable by the process according to claim 8.
- 25 10. Compound according to any of the claims 1-7 and 9, for use as a medicament.
 - 11. Medicament comprising a compound according to any of the claims 1-7, 9, 10 and pharmaceutically acceptable carriers/diluents.
- 12. Use of a compound according to any of the claims 1-7, 9, 10 for preparing a medicament.
 - 13. Use of a compound according to any of the claims 1-7 for the manufacture of a medicament for treating depressions, obsessive compulsive disorders,
- 35 panic disorders, bulimia, anorexia, pain, obesity, senile demential, migraine, anorexia, social phobia, depressions arising from pre-menstrual tension.

14. Use of a compound according to any of the claims 1-7, 9, 10 as a reagent in further syntheses.

15. Process for providing a salt ion or solvate, comprising the steps of mixing together a 5 compound according to any of the claims 1-7, 9 and 10 with a reagent selected from the group consisting essentially of:

hydrochloric acid hydrobromic acid

10 hydriodic acid
acetic acid
propionic acid
maleic acid
fumaric acid

citric acid
embonic acid/pamoic acid
sulfuric acid
water
methanol
ethanol

15 oxalic acid succinic acid tartaric acid

16. Salt obtainable by the process according to claim 15.

20 17. Salt according to claim 16, having a purity of at least 90 wt%, preferably at least 95 wt% and most preferably at least 98%.

18. Paroxetine maleate having a purity of at least 98%.

19. Paroxetine acetate having a purity of at least 98%.

20. Process for providing a free base comprising the step of mixing together a compound according to any of the claims 1-7, 9, 10 with an organic and/or inorganic base.

21. Process according to claim 20, wherein the base is selected from the group consisting essentially of: sodium hydroxide, potassium hydroxide, calcium hydroxide, ammonium hydroxide, sodium carbonate, methylamine, dimethylamine, triethylamine, pyridine.

22. A free base obtainable by the process according to claims 20 or 21, said free base having a purity of at least 95% and most preferably at least 98%.

23. Paroxetine free base according to claim 22, having a purity of at least 98%.

The state of the s

Reference

- Psychopharmacology, 57, 151-153 (1978)]; ibid. 68, 229-233 (1980), European Journal of Pharmacology, 47, 351-358 (1978)]; in USP 4007196, the preparation of paroxetine maleate is reported.